

# ANALYTICAL THEORIES OF UNDERDEVELOPED ECONOMIES

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The problem of analyzing underdeveloped economies is so broad and so diffuse, and the possible elements are so numerous, that there is almost no end to the various aspects that can be selected for consideration. Economists are particularly aware of deficient knowledge in these areas.<sup>1)</sup>

The process of economic development in backward countries<sup>2)</sup> is hard to visualize, not only because so many different conditions must be evaluated simultaneously, but above all because of the vicious circles that are present. Once development has started, the circle is likely to become an upward spiral as many or all the prerequisites for development are successively beginning to be met.

Confronted with such difficulties, the economist appears to face broadly two choices. He may integrate orthodox economic and social theory, as it exists in advanced western countries, and choose assumptions appropriate

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1) See, Albert O. Hirschman; **The Strategy of Economic Development** (New Haven: Yale University Press, 1958), p.1; Benjamin Higgins; **Economic Development**, (New York: W.W. Norton and Co., Inc., 1959), p. 410; Hollis B. Chenery; "The Role of Industrialization in Development Programs," **The Economics of Underdevelopment**, p. 219.

2) Professor H. Myint argued that although the terms "underdeveloped" and "backward" were generally used as interchangeable by applying them to aggregate geographical concepts such as "countries, areas, and regions," he would prefer to give these terms different connotations by using the former to mean underdeveloped resources, and the latter to refer to the backward people, economically not culturally. See H. Myint, "An Interpretation of Economic Backwardness," **The Economics of Underdevelopment**, p. 93-132.

Various terms are used to apply to low-income countries. At one time it was common to refer to some countries as "backward" nations. After World War II the same countries were referred to as "underdeveloped" nations. By the mid-1950's the more sophisticated reference was to the "less developed" countries. In growing usage today by the United Nations and others is the reference to "developing" nations. Each term has its advantages and disadvantages. In this paper the terms are used interchangeably.

to the institutional framework of underdeveloped areas.<sup>3)</sup> The alternative is to try to formulate a new and distinctive general theory.<sup>4)</sup>

The latter approach may lead not only to a formulation in highly abstract terms, but also to one that abstracts the intellectual problem from its broader social and political setting. This study will briefly suggest those aspects of economic conditions which may be significant for growth, and something of their variability which inhibits generalization. The discussion must necessarily be piecemeal and overlapping rather than neatly integrated, because the subject does not yet lend itself to more systematic and integrated treatment.

### I. Interacting Factors in Underdevelopment

The intensive study of the problems of underdeveloped economies has produced an ever lengthening list of factors and conditions, of obstacles and prerequisites. Any inquiry should be objective, tangible, and quantitative. However, most have proceeded in opposite directions. It is useful at this point to list the many valuable insights gained from the theories which have been formulated.

The purpose of this section is to present several theories of underdevelop-

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3) Europe in 1750 differed from Asia and Africa in 1950. Nevertheless, the most dramatic examples of take-off into sustained and cumulative growth are to be found in eighteenth and nineteenth-century Europe. What happened in these countries in that period is what one would prefer to have happen in Asia, Africa, and Latin America now. Consequently, it is important to find out what scholars writing of that period regarded as those factors responsible for economic growth and what they considered was required to keep it going. Without examining their development theories, such as classical and Marxist models, Schumpeter's theory, and Harrod and Hansen growth theory, we can have no assurance that subsequent work in this field is any more penetrating than theirs. It would be useful if we had available a theory of economic development general enough to serve as a basis for policy in countries at all stages of economic advance, which includes all types of economic systems. According to Professor Kuznets, this is impossible. Perhaps, then, one must abandon the search for a truly 'general' theory and be content with a quest for a 'special' theory of underdevelopment. The study in this paper will be devoted to the quest for such a theory. See, Simon Kuznets, "Toward a Theory of Economic Growth." **National Policy for Economic Welfare at Home and Abroad**, ed. Robert Lekachman, (New York: Doubleday & Co., 1955), p. 14-15.

4) See, Benjamin Higgins, *op. cit.*, p. 274-293; see also, J.H. Boeke, **Economics and Economic Policy of Dual Societies**, (New York: Institute of Pacific Relations, 1953), p. 4, and "Three Forms of Disintegration in Dual Societies," lecture given in the course on Cooperative Education of the International Labor Office, Asian Cooperative Field Mission, October, 1953, published in Indonesia, Vol. 7, No. 4 (April, 1954).

ment for the purpose of clarifying the understanding of the development process.

### Survey of the Literature

It is interesting to note that, though stated in modern terminology, much of the knowledge of the backward economies is little more than an elaboration of elements contained in the classical model of development. Smith, Ricardo, Malthus, and J.S. Mill concentrated on how the market might be extended, on the possibilities of increasing productivity by the division of labor, and on the problem of capital accumulation.<sup>5)</sup> Mill, for one, clearly realized crucial problems of the underdeveloped economy:

In countries where the principle of accumulation is as weak as it is in the various nations of Asia; where people will neither save, nor work to obtain the means of saving, unless under the inducement of enormously high profits, nor even then, if it is necessary to wait a considerable time for them; where either productions remain scanty, or drudgery great, because there is neither capital forthcoming nor forethought sufficient for the adoption of the contrivances by which natural agents are made to do the work of human labour; the desideratum for such a country, economically considered, is an increase of industry, and of the effective desire of accumulation.<sup>6)</sup>

The German historical school from List to Sombart evolved theories of stages of economic or socioeconomic development.

It is not intended to explore the vast literature on "obstacles to economic development." It is, however, useful at the outset to provide a general picture of what constitutes a poor country as described in the literature. Professors Meier and Baldwin elaborated six basic economic characteristics: (1) primary-producing, (2) population pressures, (3) underdeveloped natural resources, (4) economically backward population, (5) capital-deficient, and (6) foreign trade-oriented. These characteristics are not found to the same degree in all poor countries, nor are these the only characteristics of a poor country. But in broad terms these characteristics can be regarded as typical, and in combination they portray a type.<sup>7)</sup>

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5) Gerald M. Meier; "The Problem of Limited Economic Development," **Economia Internazionale**, Vol. 6, No. 4 (1953), p. 62.

6) J.S. Mill; **Principles of Political Economy**, (London: Longmans, Green, Co., 1842), p.230-31

7) Gerald M. Meier and Robert E. Baldwin; **Economic Development**, (New York: John Wiley & Sons, Inc., 1957), p.273.

According to Gottfried Harberler:

The most common criteria of economic development as they appear in the current literature are based on four ideas: (1) the notion of disguised unemployment in underdeveloped countries, (2) the notion of "balanced growth" or "big push," (3) the demonstration effect, and (4) the theory of secular deterioration of the terms of trade for underdeveloped countries.<sup>8)</sup>

Jacob Viner discusses critically the nature of the problems that have played a significant role in recent writings on economic development. He classifies the various bottlenecks and concludes that only foreign aid is capable or indispensable to the poor economies.<sup>9)</sup>

The authors of a UNESCO article emphasize land rather than capital as a development bottleneck. The result of their survey of existing agrarian arrangements is a plea for drastic land reform.<sup>10)</sup>

Professor Leibenstein and other writers attempt to solve the problem with the behavior of population.<sup>11)</sup> Their position is that the experience of economic development may itself create the incentives needed to control the dangers of overpopulation.

Professor Baran of Stanford University holds the view that the principal obstacle to rapid economic growth in the backward countries is not shortage of capital, but is due to three other important factors. The first is the way in which the potential economic surplus is utilized. It is absorbed by various forms of excess consumption of the upper class, by increments to hoards at home and abroad, by the maintenance of vast unproductive bureaucracies, and by foreign capital. Second, the lack of "entrepreneurial talent" is a substantial part of the explanation of the difference in the level of investment and technological advance between developed and undeveloped countries, and between different stages in the progress of any single country. The third is overpopulation in relation to natural resources and productive

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8) Gottfried Haberler; "Critical Observations on Some Current Notions in the Theory of Economic Development," *Development and Society* ed. David E. Novack and Robert Lekachman, (New York:St. Martin's Press, 1964), Part, I pp. 70-79.

9) Jacob Viner; "Barriers to Economic Development," ***Development and Society***, pp. 81-90.

10) United Nations; "Land Reform: Defects in Agrarian Structure and Obstacles to Economic Development," ***Development and Society***, pp. 108-124.

11) Harvey Leibenstein; ***Economic Backwardness and Economic Growth***, (New York: John Wiley & Sons, Inc., 1963), pp. 46-170; Albert O. Hirschman; ***The Strategy of Economic Development***, (New Haven:Yale University Press, 1958), pp.176-182; and Ansley J. Coale; "Population and Economic Development," ***Development and Society***, pp. 125-148.

plant and equipment.<sup>12)</sup>

Everett Hagen takes issue with "Neo-Malthusians," who persist in regarding population pressure as a barrier to economic development, chiding them for excessive gloom. His conception of "The Common Sense of Population" seems to be in conflict with the concept of overpopulation. Although there can be reservations about both the facts and the theories presented in Hagen's analysis, perhaps his final conclusion can be accepted.<sup>13)</sup>

H.W. Singer discusses a number of unique barriers in some of his papers.<sup>14)</sup> He starts with the foreign trade relation in terms of the growing inequality in the distribution of world income attributing the losses to a major structural change in international economic relations, that is, the change in price relations between primary materials and manufactured goods. He proceeds to the needs of development, such as the accumulation of industrial capital, the spread of modern technological methods, the rise in standards of education, and the fruits of economic development, such as better nutrition, progress in social security, the development of highly complex administration, and multiple state intervention. Next, he turns to key problems of underdeveloped countries within the frame of interlocking vicious circles.

Ragnar Nurkse concentrates on the danger of inadequate demand for capital goods and limited markets, and he observed the vicious circle of poverty.<sup>15)</sup>

Most of the theories of growth of low-income economies assume that any barriers to growth are economic, and that the process of economic growth is adequately dealt with by economic analysis alone.<sup>16)</sup>

12) Paul A. Baran; **The Political Economy of Growth**, (New York: Monthly Review Press, 1957), pp. 226-248.

13) See, Everett E. Hagen; **On the Theory of Social Change**, (Homewood, Illinois: The Dorsey Press, Inc., 1962), pp. 47-49, and "The Common Sense of Population," CENIS Document, c/58-14, p.20.

14) See, Hans W. Singer; "Economic Progress in Underdeveloped Countries," **Social Research**, Vol. XVI (1949), pp. 1-11, and "The Mechanics of Economic Development," **The Indian Economic Review**, (August, 1952), p. 589.

15) Ragnar Nurkse; **Problems of Capital Formation in Underdeveloped Countries**, (New York: Oxford Basil Blackwell, 1955), pp.1-5.

16) The reasoning underlying this approach is that almost all individuals in every society seek higher income. Hence, it seems natural that everywhere individuals should seek improved methods of production. There seems no reason why people should not want to improve production techniques rapidly. Based upon this assumption, the analysis ignores any institutional or social factors which may influence growth. Since the overriding factor is economic, they search continually for the economic factors which may have made it impossible for a particular society to have failed to develop.

A landmark in the analysis of the low-income condition is Rosenstein-Rodan's balanced growth theory. Nurkse, Lewis, and Scitovsky followed this line. A similar version, concentrating on the demand side, has also been annexed to the theory of the big push.<sup>17)</sup>

Because with further knowledge the economic barriers seem less formidable and because other considerations have been forced upon us, some economists writing about growth usually acknowledge the influence of noneconomic factors.<sup>18)</sup>

The factors suggested thus far do not fully explain the ubiquitous poverty and inefficiency, and the interlocking vicious circles which exist in underdeveloped countries. It is possible, however, that various writers have been

17) See, P.N. Rosenstein-Rodan; "Problems of Industrialization of Eastern and South-Eastern Europe," *Economic Journal*, Vol. 53 (June-September, 1943), pp. 202-11; "Notes on the Theory of the Big Push," Paper submitted to the Rio Roundtable of the International Economic Association, 1957, mimeographed; Nurkse, *op. cit.*, Chapter II; W. Arthur Lewis; "Economic Development with Unlimited Supplies of Labour," *The Economics of Underdevelopment*, ed. A.N. Agarwala and S.P. Singh; (New York: Oxford University Press, 1963), p. 400, and *The Theory of Economic Growth*, (Homewood, Illinois: Richard D. Irwin, Inc., 1955), pp. 274-83; Tibor Scitovsky, "Two Concepts of External Economies," *Journal of Political Economy*, Vol. 62 (April, 1954), pp. 43-52, and *Papers on Welfare and Growth*, (Stanford: Stanford University Press, 1964), p. 69. The first two authors stress balance in demand, the latter two balance in supply.

18) Nicholas Kaldor; in *Essays on Economic Stability and Growth*, (London: G. Duckworth and Co., Ltd., 1960), p. 236, said: "In my view the greatly accelerated economic development of the last 200 years—the rise of modern capitalism—can only be explained in terms of changing human attitudes to risk-taking and profit-making..... The emergence of the business enterprise characteristic of modern capitalism was thus the cause rather than the result of changes in the modes of production: and it was the product of social forces that can not in turn be accounted for by economic and technical factors."

Bert F. Hoselitz; in "Economic Growth and Development; Noneconomic Factors in Economic Development", *American Economic Review* (May, 1957), p. 29, remarked: "It is not always easy to distinguish between economic and noneconomic factors," and C. Wolf, Jr. argued in his article "Institutions and Economic Development" (*American Economic Review*, 1955, pp.867-883), that apart from the build-up of economic overhead capital, Such as a communications and transport system and investment in harbor facilities, some warehouses, and similar installations favoring especially foreign trade, most of the innovations introduced during the preparatory period are based upon changes in the institutional arrangements in the legal, educational, familial, or motivational orders. Once these new institutions have been created, they operate as 'gifts from the past,' contributing freely to the vigorous spurt of economic activity in the period of take-off. In backward countries, exogenous or noneconomic factors exercise relatively most influence."

inspired by a variant of the economic rationale. All the mentioned characteristics are found to some degree in all poor countries. The next task is a more detailed discussion of those theories that bear on the related problem. The classification of these theories is somewhat artificial and overlapping since the subjects distinguished may represent the same factors looked at from different points of view.

### Vicious Circle of Low Income and Inadequate Saving

It is quite common to find references in the literature to vicious circles<sup>19)</sup> A country is poor because it has insufficient capital, income, demand, and so forth; and it cannot raise capital because it is poor. The vicious circle idea implies nothing more than the fact that the determinants of economic backwardness are mutually interacting. In many cases the vicious circle idea alludes to the twin notions of the persistence of backwardness and the difficulty of seeing a way out.

One aspect is the vicious circle of low income and the inability to save. In Singer's words, "There is, of course, the dominant vicious of low production—no surplus for economic investment... no tools and equipment... low standard of production."<sup>20)</sup> Or, in the words of Nurkse, "On the supply side there is the small capacity to save, resulting from the low level of real income. The low real income is a reflection of low productivity, which in its turn is due largely to the lack of capital. The lack of capital is a result of the small capacity to save, and so the circle is complete."<sup>21)</sup>

It is a matter of common judgment among economists acquainted with income statistics and the economic structure of low-income countries that the distribution of income is more unequal in such countries than in high-income ones.<sup>22)</sup> From the point of view of investment related to the supply of capital, especially as it exists in underdeveloped economies, the system is hard to beat.

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19) See, Hans W. Singer; "Economic Progress in Underdeveloped Countries," **Social Research**, Vol. 16 (1949), pp. 1-11; Harvey Leibenstein, *op. cit.*, p. 95; August Maffry, "Problems of Economic Development," **The American Journal of Economics and Sociology**, Vol. 11, No. 3 (April, 1952), pp. 327-342; and N.S. Buchanan, "Deliberate Industrialization for Higher Incomes," **Economic Journal**, Vol. 56, No. 4 (December, 1946), pp. 545-548.

20) Singer; *op. cit.*, p. 5.

21) Nurkse; *op. cit.*, p. 51.

22) Charles P. Kindleberger; **Economic Development**, (New York: McGraw-Hill Book Co., 1965), p. 8.

Many poor countries are contriving to mobilize savings into productive sector, At the present income levels, individuals in all but the lowest-income classes in these societies spend part of their income on products not at all related to the physical necessities of life. If sufficiently motivated, they would perhaps save enough to finance the investment necessary for raising per capita income. Some economists distrust the hypothesis that saving is impossible in low income societies.<sup>23)</sup>

It is recognized that the limitation of resources compels a choice among developmental projects. To decide just what should be counted as potential saving is difficult. Attempts to measure it present additional obstacles. Much of the savings tend to go into short-term speculative investment rather than productive investment.

The failure of the saving ratio to rise over the long period has been explained by Nurkse in terms of the demonstration effect, a concept originally devised by Duesenberry.<sup>24)</sup> In some countries where the transition to an exchange economy has not been completed, the demonstration effect, if operative, might actually stimulate more effort to create a surplus of agricultural products for the market. This would promote an exchange economy, since the ability to purchase new types of consumer goods depends on money incomes. The extension of the exchange economy involves greater specialization and increased production, hence its potential for additional saving. A more general point is that the demonstration effect tends to increase the aspiration to consume as well as the propensity to consume. As long as it affects the aspiration to consume, it may actually lead to greater effort or to an inflow of producers from the subsistence sector into the exchange sector of the economy, thereby increasing production, and eventually the volume of savings.

### External Economies

Rosenstein-Rodan cited the limitations imposed by the size of the market. The stress upon external economies, he argues, is a major mark of the difference between static theory and a theory of growth. In static theory external economies are relatively unimportant. But in a dynamic setting, external economies abound because given the inherent imperfection of the investment market, imperfect knowledge and risks, pecuniary and tech-

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23) H. Myint, *op. cit.*, p. 96.

24) Nurkse, *op. cit.*, pp. 21-23.

nological external economies have a similarly disturbing effect on the path towards equilibrium.

- (1) Indivisibilities in the production function, especially the indivisibility of supply of Social Overhead Capital (lumpiness of 'capital')
- (2) 'Indivisibility' of Demand (complementarity of demand)
- (3) 'Indivisibility' (kink in the) 'supply of Savings'<sup>25)</sup>

Because of these indivisibilities, proceeding "bit by bit" will not add up in its effects to the sum total of the single bits. A minimum quantum of investment is a necessary (though not sufficient) condition of success. This is in a nutshell, the contention of the theory of the big push.

Allyn Young had observed that at the heart of economic progress there was the interrelatedness by which the expansion of one industry would create markets for another and thus generate economies external to the first industry. This was a broader concept of external economies than Marshall's, which referred to those external to the firm. Rosenstein-Rodan believes that the "residual" growth, which cannot be explained by inputs of land, capital, and labor, is the result of external economies in the growth process. If a large part of the benefits of economic growth are external in the sense that they accrue to others than the initiator, there may be no incentive to start the process. Investment projects may be discouraged by the smallness of the market, especially if demand is inelastic and investment is lumpy. It appears to be the intention of the balanced-growth doctrine to create horizontal and vertical complementarities so that external economies arise as markets are simultaneously enlarged.<sup>26)</sup>

## II. Dualistic Theory and Industrialization

Many economists who have specialized in the area of economic develop-

25) P.N. Rosenstein-Rodan; **Notes on the Theory of the "Big Push,"** M.I.T., CIS (March, 1957) p. 8.

26) A number of projects simultaneously undertaken in different industries might generate external economies for one another by enlarging markets to the point where they are all profitable. "A wave of new investments in different branches of production can economically succeed, enlarge the total market, and so break the hands of the stationary equilibrium of underdevelopment." See, Nurkse; **op. cit.**, p. 15, and his essay "Balance Growth and Specialization" printed in his **Equilibrium and Growth in the World Economy**, (Cambridge: Harvard University Press, 1961) where he says, "Each industry must advance along an expansion path determined by the income elasticity of consumer demand for its product. This simple idea must be the starting point in any expansion of production for domestic markets in the less developed countries."

ment recognize the importance of the interplay of various elements. To find an acceptable explanation of how poor nations can break out of the vicious circle of economic deprivation, it is appropriate to examine some additional arguments.

A real problem is the lack of the necessary factual knowledge about some of the basic relationships involved in the growth process, particularly those relating to inadequate demand, population growth, land arrangements, and capital supply, entrepreneurial motivation, historical, political, social and cultural prerequisites, and the like. Nevertheless, some syntheses based on the views of the various writers should help in the formulation of the policies.

A proper theoretical basic is essential if effective policies are to be established. No one claims perfection for his theory of development, but sensible and useful policy recommendations can be made without a perfect and thoroughly refined theory.<sup>27)</sup>

### Social Dualism

It may be argued that lopsided development, in which the production of one or a few raw materials for export advances far out of step with the country's general economic development, is the outcome of overspecialization. For extracting raw materials to export to the industrial countries, modern, highly productive operations have been developed, while age-old practices have continued almost unchanged in every other segment of an underdeveloped economy. Modern industrialism may almost bypass the much larger non-market-oriented sector of the country.

Dr. Boeke gives the following formal definition of a dual society. "Social dualism is the clashing of an imported social system with an indigeneous social system of another style. Most frequently the imported social system is high capitalism. But it may be socialism or communism just as well, or a blending of them."<sup>28)</sup> He says this dualism is a "form of disintegration which came into existence with the appearance of capitalism in pre-capitalistic countries." On the other hand, Professor Higgins concludes that

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27) These policies must at least be as good as one's knowledge permits. However, one has to admit their limitations. See, Wallace C. Peterson; "Economic Policy and the Theory of Economic Growth," *Nebraska Journal of Economics and Business*, Vol. 2, No. 1 (Spring, 1963), pp. 31-32.

28) J.H. Boeke; *Economics and Economic Policy of Dual Society*, (New York: Institute of Pacific Relations, 1953), p. 6,

dualism arises from a clash between East and West.<sup>29)</sup> "Dualistic" is for Boeke virtually synonymous with "Eastern." Boeke contends that "we may use the term 'eastern economics' instead of 'dualistic economics' because both terms cover the same situation, to wit, the situation that is typical for the countries in South and East Asia."<sup>30)</sup>

In Boeke's view, a closely related feature of a dualistic society is the almost complete absence of profit seeking in an Eastern society. "Speculative profits are attractive to the Oriental, but these profits lack every element of that regularity and continuity which characterizes the idea of income." Similarly, there is no professional trading in the Eastern village community. Eastern industry is characterized by "aversion to capital," in the sense of "conscious dislike of investing capital and of the risks attending this, "only slight interest in accurate social and economic achievement, lack of business qualities, failure to come up even to the minimum requirements of living standard, lack of elasticity of supply, lack of organization and of discipline and corrective local specialization. All this is said to be in sharp contrast to the industry of the Westernized, capitalistic sector of underdeveloped areas. The Oriental is, unfortunately, rather substantially lacking in organizing power as compared to modern Western enterprises, Where Western industry is dominated perhaps by common-sense reason, Eastern society is molded by "fatalism and resignation."<sup>31)</sup>

Because of these great differences between Eastern and Western economies, Western economic theory cannot be totally applicable to the underdeveloped areas of the world. Western economic theory, Boeke says, is based on unlimited wants, a money economy, and many-sided corporative organizations, none of which exists in Eastern societies. Western theory is designed to explain capitalistic society, whereas the Eastern village is pre-capitalistic. He is particularly critical of any effort to explain the allocation of resources or the distribution of income in terms of marginal productivity theory, mainly because of the great immobility of resources in an Eastern society.<sup>32)</sup>

This picture of the nature of underdeveloped areas extends not only to methods of production and distribution, but also to attitudes and ways of living and doing business. Lewis states:

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29) Higgins; *op. cit.*, pp 275—6.

30) Boeke; *op. cit.*, p. 12.

31) Boeke; *Ibid.*, pp. 101—102.

32) Higgins; *op. cit.*, pp 276—277.

We find a few industries highly capitalised, such as mining or electric power, side by side with the most primitive techniques; a few high class shops, surround by masses of old style traders; a few highly capitalised plantations, surrounded by a sea of peasants. But we find the same contrasts also outside economic life. There are one or two modern towns, with the finest architecture, water supplies, communications and the like, into which people drift from other towns and villages which might almost belong to another planet. There is the same contrast even between people; between the few highly westernised, trousered, natives, educated in western universities, speaking western languages, and glorying in Beethoven, Mill, Marx or Einstein, and the great mass of their countrymen who live in quite other worlds.<sup>33)</sup>

Although most of the poor countries have not yet experienced a take-off into self-sustained growth, they do exhibit some elements of modernization or industrialization in one sector or in parts of their economies. In this sense, an underdeveloped economy is frequently found to represent social and economic transitional dualism. The theory of the dualistic society also deals with the process of change of one type of economy into some other more advanced type. This will be discussed in the next step.

The initial approach of economists, in the surge of interest after World War II in the problems of growth, was concerned with economic analysis alone. But Professor Nurkse, following a statement that capital formation is at the heart of the problem of economic development, said: "We shall do well to keep in mind, however, that this is by no means the whole story. Economic development has much to do with human endowments, social attitudes, political conditions and historical accidents. Capital is necessary but not a sufficient condition of progress."<sup>34)</sup>

### Dual Economy as a Characteristic of Development

Dualistic countries have two clearly differentiated sectors: one confined mainly to peasant agriculture and handicrafts or very small industry, and the trading activities associated with them; the other, consisting of plantations, mines, petroleum fields and refineries, large-scale industries, and the transport and trading activities associated with these operations. Levels of technique, productivity, and income are low in the first sector and high in the second. Overcoming this dualism is a major task of economic development policy.

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33) W. Arthur Lewis, "Economic Development with Unlimited Supplies of Labor, *The Economics of Underdevelopment*, p. 400.

34) Nurkse; op. cit., p. 1.

Further analysis of the dualism led Boeke to two policy conclusions. First, as a rule, one policy for the whole country is not possible. Second, what is beneficial for one section of society may be harmful for the other.<sup>35)</sup> What the Western world can do for the underdeveloped areas is to leave them alone. All his examples of "inapplicability" or Western theory refer to conflicts between his observations and the attempt to formulate a policy synthesis.<sup>36)</sup>

The attention given to dualism now centers less than before upon its socio-cultural aspects. It is felt that dualism can be more readily explained in economic and technological terms. It is difficult to share Boeke's pessimism regarding possibilities of technological progress in Eastern industry.

The existence of dualism, however, may create tensions that impede an economy's development.<sup>37)</sup> If the absorption of the indigenous economy into an expanding modern money economy can be brought about, it may become growth-oriented.

### **Industrialization process as a Synthesis of Developing Economies**

By applying Rostow's stage approach of the course of development, it is possible to identify most developing economies as lying within the pre-conditions for take-off and take-off societies as well.<sup>38)</sup>

Of Rostow's five stages of growth, the most relevant for presently poor countries are the first three—the "traditional society," the emergence of

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35) Boeke; *op. cit.*, p. 289.

36) One may raise the question why Boeke's dualism should be included in an attempt toward a general synthesis. The answer is that dualism has an important significance in identifying the economic structure of various countries. To derive policy implications with regard to economic security—insurance—in poor countries, one should start from this important doctrine. The connection will be shown in later chapters.

37) A good example is the demonstration effect.

38) As a grand historical thesis, Rostow's analysis of stages of growth has generated unusually wide interest. Basic to Rostow's analysis is his sketch of a dynamic theory of production which emphasized the composition of investment and the growth of particular sectors in the economy. Its appeal has been especially strong in the underdeveloped economies. See, W.W. Rostow; **The Stages of Economic Growth**, (Cambridge: The University Press), 1960.

It has also received substantial criticism, and some of these critiques deserve equal attention for their concern with those historical factors neglected by Rostow. See, Meier; *op. cit.*, pp. 23-41.

“the preconditions for take-off,” and the “take-off.” The take-off is meant to be the central notion in Rostow’s scheme, and it has received the most attention.

There are several problems of choice involved in defining the take-off with precision. The following three conditions are required for the take-off definition by Rostow:

- (1) a rise in the rate of productive investment from, say, 5 per cent or less to over 10 per cent of national income (or net national product);
- (2) the development of one or more substantial manufacturing sectors, with a high rate of growth;
- (3) the existence or quick emergence of a political, social and institutional framework which exploits the impulses to expansion in the modern sector and the potential external economy effects of the take-off and gives to growth an on-going character.<sup>39)</sup>

One can define economic growth as meaning increasing output, but economic development implies both more output and changes in the technical and institutional arrangements by which it is produced.<sup>40)</sup> The very general statement of the growth process contained in the isolation of the industrialization process places primary emphasis on initial conditions, on structural parameters, and on exogenous effects as the major sources of the explanation of how an economy can grow. Though abstract, this statement provides the general framework that may lead to more explicit formulation of economic development.

### III. Policy Measures

Professor Williams has stated, “All the great theorists have had policy as their central interest, even if their policy was merely laissez faire...”<sup>41)</sup> This fundamental justification for theory is the point of view adopted here. Underdeveloped regions differ in their susceptibility and resistance to the process of social transformation from a state of relatively slow growth to a state of self-sustained growth.

### Policy Objectives in Underdeveloped Economies

The best policy is the one that will allocate resources so as to maximize the aggregate satisfaction of the community through the consumption of

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39) See, Rostow; *op. cit.*, p. 39

40) Kindleberger; *op. cit.*, p. 1.

41) J.H. Williams; “An Economist’s Confession,” *The American Economic Review*, (March, 1952), p. 10.

goods, services, and leisure, with given resources, techniques, institutions, and tastes.<sup>42)</sup> Its concern is merely with the processes by which more goods and services become available. Arthur Lewis explains why he thinks economic growth is desirable.<sup>43)</sup> "The advantage of economic growth is not that wealth increases happiness, but that it increases the range of human choice. It is very hard to correlate wealth and happiness. For what distinguishes men from pigs is that men have greater control over their environment: not that they are happier. And on this test economic growth is greatly to be desired."

In the discussion of economic policy there is an important place for objective analysis and empirical observation, though in the final stages of the argument recourse to value judgments is inevitable. Value judgments are, so to speak, "built into" economic analysis to such an extent that it is vain to expect that economics can be a science completely detached from all value considerations. It can be argued that most economic generalizations necessarily contain within themselves specific implications in the matter of economic policy.<sup>44)</sup>

It is impossible to postulate any single objective of policy. A policy may have to sacrifice some of one in order to get more of another. Choices must be made. The major objectives of economic policy are often stated as economic progress, stabilization, justice, and economic freedom.<sup>45)</sup> These goals are all interrelated, often in a complex fashion.

A large part of the growing literature on development is based on the conviction that the analysis of underdevelopment is not of immediate policy relevance, but this does not imply an abdication of the development economists from the arena of policy and policy advice. A good way of approaching policy problems of economic development is by looking at them for the intellectual framework in which economists have been taught to think.

With a profile of a poor country in mind, it is possible to consider what are the general requirements for its development. The analytical model

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42) Higgins; *op. cit.*, p. 433.

43) Lewis; **The Theory of Economic Growth, Appendix: Is Economic Growth Desirable?** pp.420-435.

44) For the discussion of positive and normative science for the value judgment, see, W.C. Peterson; **Income, Employment, and Economic Growth**, pp. 20-23.

45) Kenneth E. Boulding; **Principles of Economic Policy**, (Englewood Cliffs, N.J.: Prentice-Hall Inc., 1958), p. 19.

should include the following elements as a minimum standard: (1) use and accumulation of capital, (2) investment choice(criteria), and (3) domestic attitudes.

### Capital and Savings

Economic growth is associated with an increase in capital<sup>46)</sup> per head. Little is known, however, about the marginal capital-output ratio in any underdeveloped country with respect to the composition of capital. There is no typical pattern either.

Most economists agree, however, that a major requirement for development is the accumulation of real capital. This involves the following independent activities; (1) measures to increase savings, (2) a finance and credit mechanism.

A strong financial structure is important in influencing the mobility and allocation of capital and in changing savings into productive investment, but the mere existence of channels of finance does not guarantee an increase in the level of capital formation.

There are several obvious ways to increase savings. One is to restrict domestic consumption. This can be accomplished in various ways. Increased taxation involving forced savings and reduced disposable incomes might have the negative effect of reducing voluntary savings and incentives to save. In economies where the output of consumer goods cannot be increased for want of land to produce food, or machinery to produce manufactures, it may nevertheless be possible to use surplus labor to produce certain forms of capital.

The second method of accumulating capital is through the removal of disguised unemployment from the land and service industries. In one sense, the countries which have surplus labor have an advantage over those countries which have not. Surplus labor can be used for building roads, irrigation systems, simple construction works, and many other kinds of works without reducing the output of anything else. This removal of disguised unemployment may be difficult, however. Those who are withdrawn from agriculture will have to be offered income above the subsistence

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46) By capital is meant the accumulated stock of resources which contributes to a larger flow of goods and services through time, or which serves as a reserve sustaining a higher level of consumption at a time of more urgent demand or need than would otherwise be possible.

level, and will need training for their new jobs. Some additional capital equipment and overhead capital may hamper the transfer.

An alternative way of getting capital without inflation or taxation is to persuade people to work on projects without payment. One can see that this is indeed feasible in rural areas, if the works in question are of strictly local interest. Well-known "Community Development" has provided good successes through Asian countries.<sup>47</sup> This program is valuable because it stimulates the communal spirit and encourages the villagers to feel that they can help themselves—a sentiment which may yield dividends in many other directions once it is aroused. (This is one form of the ancient self-insurance origin which could be found in many of those less developed areas.) The contribution which self-help projects can make to capital formation is strictly limited by the fact that people will work only on projects of strictly local interest. But if it is expanded by nationwide projects and worked out by government help with some provisions for pay and training, it may cause some chain-reaction in capital formation.

The fourth method for increasing savings is through restriction of consumption imports. To achieve the desired results, it is essential that the released purchasing power not be used to raise domestic consumption.

Foreign borrowings and investments constitute a fifth way of securing the resources necessary for investment.

Next, the foreign trade sector may provide some potential for capital accumulation through an improvement of the terms of trade. To be a source of capital formation, the additional import capacity which results from an improvement in the terms of trade must be channeled into additional saving. If the increase in export proceeds is to bring about a corresponding growth in the volume of imports of capital goods, it is necessary to prevent consumption from rising; the increment in income resulting from the greater value of exports must be saved. To the extent that this saving does not occur voluntarily, it will have to be extracted through taxation, exchange control, or other protective measures.

Finally, if profits are the major source of saving, the economy must be revamped to increase the share of profits in the national income by expanding the capitalist sector of the economy. The classical economists used to emphasize that economic development involved a transfer of

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47) United States Operation Mission, **Community Development and Rural Area.** (Seoul, Korea: Community Development Deut., 1959), pp. 41-53.

workers from non-capitalist to capitalist employment (i.e. from unproductive to productive employment), and that the rate of this transfer depended on the extent of saving and on the rate of growth of capital. If there is to be any productive investment, the capitalist sector of the economy must grow. The more rapidly the opportunities for productive investment expand, the faster profits grows, and the greater is capital accumulation. This means that the fundamental explanation of any sudden acceleration of the rate of capital formation is a sudden increase in the opportunities for making money. The British, Japanese, and Russian industrial revolutions all fit into this pattern. The importance of institutions, political, religious and caste, in helping or stifling the growth of an entrepreneurial class for opportunities cannot be overemphasized.<sup>48)</sup>

In the analysis of savings one must also take account of government savings. Because of the need for public works, government has to save. The finance for this comes out of current taxes. Special sociological factors complicate issues of fiscal policy. To meet their peculiar administrative, political, and social problems, the monetary and fiscal policies of undeveloped areas must have canons of taxation different from advanced countries. A conference of experts assembled under the joint auspices of the International Program in Taxation at Harvard University and the

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48) An article which appeared in "The Lincoln Journal" on November 13, 1966 supported this idea.

"There is an undercurrent of unrest in India and it takes little provocation to start a riot. Recently there were riots over the location of a steel plant, one because a bus failed to stop for students.

The most serious riots have been in protest to the slaughter of cows. India's sacred cows have been a contributing cause for much hunger.

The cattle population of India has been estimated at 175 million, more than one-third of her human population. Most of the cattle are non-productive and consume grain that should be used for human consumption.

It takes more than technology to bring the Asian countries into the 20th century. Religious beliefs and traditions held for hundreds of years are not shed easily. India has, since its independence, been attempting to rid itself of the caste system, and with considerable success.

It is a paradox that at the time India is spending more for research and development of nuclear energy than any other field of scientific or industrial advancement, the government is threatened over the issue of the slaughter of cows.

India, more than any other Asian country, has suffered from religious conflicts. These have been an internal divisive force and the cause of border wars with Pakistan..... Religion is still a powerful force in the lives of men though at times it seems to be in conflict with the good of mankind."

Fiscal Division of the United Nations Department of Economic Affairs, came to the following conclusions:<sup>493</sup>

(1) Institutional factors and legal systems of underdeveloped countries are to be considered paramount in the formulation of recommendations for tax changes (e.g., in some countries the jurisdiction over land taxes is vested in a level of government whose revenues are not a promising or desirable source for development funds).

(2) Recommendations for changes must take into account not only the prevailing balance of political power, but also the whole economic, social, and institutional combination of forces shaping the government (e.g., in a country with powerful landlord interests and pressures of population on land increases in the land tax may be either politically unacceptable or undesirable because they would be transmitted to tenant cultivators).

(3) Another requirement is that the recommendations should be in line with the administrative capacity of the country, so that the taxes can be enforced comprehensively and justly (e.g., sophisticated recommendations with regard to the taxation of land in inverse ratio to its optimum output may be beyond the ability of the underdeveloped country to administer).

(4) One should differentiate between short-term revenue-raising measures for the financing of urgent development projects and long-term tax reforms which are directly articulated to the steady encouragement of economic development.

Consideration must be given to the effects of taxation on the incentive to save. For this purpose, taxation should not be on personal income, but rather on expenditure. The proposals for a comprehensive tax on personal consumption expenditure through excise and other indirect taxes in place of the personal income tax may be worth reconsidering. The same effect might be obtained to some extent by exempting from the income tax that part of a man's income which he saves. Japan has permitted life insurance premiums to be excluded from the income subject to tax.

The use of public finance for capital formation in underdeveloped countries is not an academic and unrealistic notion. By stiff taxation, especially of the agricultural population, occasionally by forced loans imposed on the commercial middle classes in the towns, and also by credit expansion, which was not inflationary in so far as it reflected an increase

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49) H.P. Wald and J.N. Froomkin; ed., **Papers and Proceedings of the Conference on Agricultural Taxation and Economic Development**, (Cambridge, Mass: Harvard Law School, 1954) p. 23. In the same book, Walter W. Heller presents a thoughtful discussion. See his "Fiscal Policies for Underdeveloped Economies," in *International Program in Taxation*, pp. 63-64, 66-68 and 81-85.

The conclusion is: Economists have long recognized the difference between public finance in general and the public finance of particular countries; the general principles must be applied in a fashion appropriate to the institutional framework of each country.

in the monetary sector of the economy, Japan achieved her industrial growth without much inflation.

### Investment Alternatives

One of the most crucial problems in development policy is to examine investment choices. When one proceeds from the general requirements of capital accumulation to the more specific requirements of allocating the additional investment expenditures, it becomes necessary to establish some investment criteria. It is difficult, however, to establish criteria for the best allocation of investment. The goal of development policy is not the maximum output at a point of time but a maximum rate of growth over time. Using capital-output ratios to determine total capital requirements contains some dangers due to technical and statistical difficulties. The difficulties in establishing priorities spring directly from the continuing ignorance of the nature of the development process—in other words, the lack of a definitive general theory of economic development.

Several economists, including A.E. Kahn, Hollis Chenery, Hirschman, and Jan Tinbergen have endeavored to reduce the problem of priorities to a formula.<sup>50)</sup> The Philippines in their Five-Year Plan, 1957—1961, attempted to apply a modified version of the Chenery formula as a basis for allocating scarce resources in determining criteria of investment reflected in policy objectives. This includes the need:

1. To direct resources toward the most productive uses
2. To conserve foreign exchange
3. To reduce unemployment
4. To improve the distribution of real income
5. To promote economic growth.

It was argued that for a given tempo of change, a certain minimum per capita income level has to be achieved in order for the economy to generate sustained per capita income growth (minimum effort thesis). On the other hand, given a limited amount of investment resources and a series of proposed investment projects whose total cost exceeds the available resources, the priority should be placed on the projects that will make the greatest contribution relative to their cost. The social marginal productivity

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50) See, Hollis Chenery; "The Application of Investment Criteria *Quarterly Journal of Economics*, Vol. 57 (February, 1953) pp. 76—96; Hirschman, *op. cit.*, Chapter 5; *Investment Choices and Strategies*, pp. 76—97; and A.E. Kahn, "Investment Criteria in Development, *Quarterly Journal of Economics*, Vol. 55 (February, 1951) pp. 38—61.

(SMP-benefit-cost ratio) becomes the instrument that should in theory permit us to rank different projects in the order of their expected contribution to output and therefore to further growth.

A far more elaborate concept has been proposed by Leibenstein. In addition to the output stream, investment criteria ought to take account also of the differential effects of the proposed ventures on the supply of entrepreneurship and of savings, on consumption habits, population increases, and a variety of other factors affecting further growth. Leibenstein admits that a criterion embodying all these repercussions in addition to SMP would be unusually difficult to apply.<sup>51)</sup>

Hirschman draws a distinction between substitution choices and postponement choices.<sup>52)</sup> He relates those choices to the best means of attaining a given end or to the best design of a project. Essential tasks always abound in underdeveloped countries since backwardness has so many different interrelated facets. From this interrelatedness he does not draw the balanced growth conclusion that a simultaneous attack is essential. He assures that isolated progress in one area is possible, but only for a limited period. Therefore, the question of priority must be resolved on the basis of a comparative appraisal of the strength with which progress in one of these areas will induce progress in the other.

In determining the sequence of projects, planning authorities should also give attention to the alternation to the alternation of "pressure-creating" and "pressure-relieving" investment recommended by Hirschman. In countries with vigorously expanding private enterprise sectors, the governments' function can be largely limited to "pressure-relieving." Where expansion through private investment is not assured, the governments' role must be more active. If steel and iron industries have high linkage effects, government action to build such plants will lead to a spurt of investment in a variety of fields. This investment in turn will reveal deficiencies that government must fill. When filled, further private investment will take place, and so on. This sort of sequence, says Hirschman, casts doubt on the view that "The government should not get itself involved in making steel ingots when it is not even capable of keeping the roads in passable

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51) Leibenstein; *op. cit.*, Chapter 15.

52) Consider any choice between project A and project B: If the decision favors A, this may mean either that B is discarded permanently or that it is postponed. See Hirschman; *op. cit.*, pp. 77—78.

condition." Hirschman concludes his discussion of the optimal sequence of projects in the following words:

Thus our division of governmental activities into these two 'inducing' and 'induced' or 'unbalancing' functions seems to be useful in a variety of ways. It is not suggested that governments should appoint a Minister for Initiating Growth and a Minister for Restoring Balance, but to think in terms of these two tasks may perhaps serve to give ministers and governments a clearer conception of their role within the development process. The frequently prevailing lack of clarity in this matter is a distinct handicap not only for the peaceful coexistence and collaboration of the public and private sectors but also for the effectiveness of governmental action.<sup>53)</sup>

One final problem associated with investment criteria is the choice of production techniques. Assuming that there will be a market for the output that results from investment, the question arises as to whether the poor country should make investments of a capital-intensive or labor-intensive kind. There is considerable disagreement on this issue. If the production function for a certain product requires a high ratio of capital to labor, and because of technological constraints labor cannot be substituted for capital, then it would be useless to employ much labor and vice versa. The relevant consideration is again the social marginal product. If the production function permits wide substitution possibilities between labor and capital, the best way to produce any given output of the product is obviously the cheapest manner from a social point of view. If the criterion of a high ratio of labor to capital is followed arbitrarily due to the lower social price of labor in less developed countries, this project would not be undertaken because it was technologically not feasible to use the labor. If, however, the employment of much cheap labor relative to capital raises the wages of the employed, consideration should also be given to the distribution of income and the effects on per capita income. With respect to innovations in poor areas, it would also follow that land-saving and capital-saving innovations should be favored over labor-saving and capital-using innovations. To strengthen its balance of payments, the country may have to direct some of the new investment into export production. If the export industries are capital-intensive, such as mining and mineral refining, investment may have to be directed to these capital-intensive industries for the sake of earning necessary foreign exchange. Thus, it may be concluded that there is no simple criterion for deciding on capital-intensive

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53) Hirschman; *ibid.* pp. 204-205

versus labor-intensive projects. The criteria depend ultimately on broad economic and social objectives.

### **Domestic Attitudes**

Development will falter if incomes are increased through external aid in the absence of sufficient internal motivation. If the process is to become cumulative and longlasting, the development forces must be fundamentally based within the developing country. Unless development forces are created within the poor country, the initial stimuli will be dissipated, and the development will be only short-lived and artificial. A major requirement is that the development process be established on an indigenous base within the society of the poor country.

It has already been seen how the various theories of development have certain policy implications according to their own value judgments. The same measure of policy may yield quite different results in different underdeveloped countries. Suggestions or recommendations for development policy framed in general terms—not qualified, as it were, in time or space—are of limited use. Yet, this approach should be adopted, since it is the only one possible in a general study of the economics of underdeveloped countries. It makes it all the more necessary to emphasize that in devising and applying policy measures in practice, a thorough and detailed study of the specific local conditions is essential. Accordingly, instead of attempting to formulate a definite set of policy recommendations for a particular country, the present discussion will simply suggest various possible lines of action of general relevance and attempt to assess some of their relative merits and demerits in broad terms.

The considerable role played today by the government has become a key causal element in the advance of economic development. Government must generally play an extremely important role. The initiating functions are conceived as the prerequisites for further development. Various general areas for government action are suggested. First, the government may have to establish markets by promoting suitable institutional arrangements. Second, government enterprise is needed in those fields where profits are too low or the risks are too large to attract private enterprise. Third, government enterprise is justified in those activities in which, even though they might be performed by private enterprise, the results of private

performance would be less satisfactory than those of government performance. Fourth, government direction is needed to promote external economies and, more generally, "balanced growth."<sup>54)</sup>

The support of social services is an undisputed area of governmental activity. In poor countries this is especially important, since an expansion of educational facilities and public health measures can weaken the obstacles to development by lessening the backwardness of people, increasing their geographic and occupational mobility, raising their productivity, and facilitating innovations. Measures to improve education and health amount in effect to investment in human resources—the quality of the people as productive agents is raised. All development programs recognize the urgency for more public education.

The government's agenda must also give high priority to the extension of transportation, communication, power facilities, water supplies, and conservation works. Roads, railways, ports, and tele-communications are necessary to provide a basic transport and communication network within which the future development of the economy can proceed. Individual projects usually await the provision of overhead capital.

#### IV. Summary

To a very large extent, the problem of the underdeveloped countries of the world is the problem of the poverty of their farm populations. The economy of these countries is mainly agricultural. The valid *prima facie* reasoning for industrialization sets out a powerful presumptive case for starting in industry.<sup>55)</sup> Contrary to a widely held view that the analyses of economic development in underdeveloped countries are hard to under-

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54) Even though Hirschman opposed the balanced growth theory, he could not deny the need for public works and services. Government's two functions, initiating (pressure-creating) and directing (pressure-relieving) carry differences of opinion. Some observers would restrict the government's role to framework planning, whereby governmental decisions are general in scope and few in number; others would extend the role to direct interference with the market mechanism and some specific controls over private enterprise; still others would completely supplant the market mechanism with central planning and control and have the State replace the private entrepreneur. See, Meier and Baldwin, *op. cit.*, Chapter 17.

55) First, developed countries have industry. Therefore, the way to become developed is to industrialize.

Second, the marginal value product of labor is higher in industry than in agriculture. To transfer a worker from agriculture to industry raises national output, especially under the disguised unemployment,

stand, it has been shown that the general nature of their problems can be summarized as the dual economy and the process of industrialization. The growth patterns of the underdeveloped economies can be classified in three ways: the degree to which they could draw from different income levels; the degree of dependence on external economies and external supplies; and the degree to which the problems of balanced growth and unexploited resources are related to the political and economic decisionmaking process.

Industrialization is surely a valid and necessary objective of economic development, but there are other goals widely shared in the underdeveloped areas including social, political, and institutional arrangements with widespread education, rightly viewed as values in themselves as well as means of achieving larger incomes. A nearly universal goal is that of providing modernization. Thus, the modernization process is not just a change in the economic factors but accompanying it is a change in social values. Without considering social values, industrialization will not lead to modernization, though it will bring an increase in output.

In an appraisal of policy implications, conclusions will depend in no small part upon the assumption concerning the state of industrialization. Although it is necessary to take account of differences in institutional framework and of culture patterns, economic behavior is highly reflected in economic development. Because of the dual picture of emerging nations, industrialization can be separated out from the overall process of modernization as a major part of the development process.

The very general statement of the growth process contained in the isolation of the industrialization process places primary emphasis on initial conditions, on structural parameters, and on exogenous influences as the major sources of the explanation of how an economy can grow. This is a very abstract statement, but it does provide the general framework that may lead to more explicit formulation of the perceptible picture of economic development. In an appraisal of developmental pictures, conclusions will depend in no small part upon the assumption concerning the state of industrialization for less developed areas. This is the main reason why this study has attempted to explore this vast subject of economic backwardness

## BIBLIOGRAPHY

- A garwala, A.N. and Singh, S.P; **The Economics of Underdevelopment.** New York: Oxford University Press, 1963. pp. 510.
- Baran, Paul A; **The Political Economy of Growth.** New York: Monthly Review Press, 1957. pp. 308.
- Bauer, P.T; **Economic Analysis and Policy in Underdeveloped Countries.** Durham, N.C.: Duke University Press, 1957. pp. 145.
- Bauer, P.T., and Yamey, B.S; **The Economics of Underdeveloped Countries.** Chicago: University of Chicago Press, 1957. pp. 271.
- Boeke, J.H; **Economics and Economic Policy of Dual Societies.** New York: Institute of Pacific Relations, 1953.
- Bonne, Alfred; **Studies in Economic Development.** London: Routledge & Kegan Paul, 1957. pp. 294.
- Boulding, Kenneth E; **Principle of Economic Policy.** Englewood Cliffs, N.J.: Prentice-Hall Inc., 1958. pp. 440.
- Brady, Dorothy S; **Research on the Size Distribution of Income, Part I, Studies in Income and Wealth, Vol. 13.** New York: National Bureau of Economic Research, Inc., 1951.
- Carlson, Valdemar; **Economic Security in the United States.** New York: McGraw-Hill Book Co. Inc., 1962. pp. 225.
- Coale, Ansley J; **The Population Dilemma.** Englewood Cliffs: Prentice-Hall Inc., 1963.
- Duesenberry, James S; **Income, Saving, and the Theory of Consumer Behavior.** Cambridge, Mass.: Harvard University Press, 1949.
- Friedman, Milton; **A Theory of the Consumption Function.** Princeton: Princeton University Press for National Bureau of Economic Research, General Series, No. 63, 1957.
- Galbraith, John K; **The Affluent Society.** Boston: Houghton Mifflin Co., 1958.
- Hagen, Everett E; **On the Theory of Social Change.** Homewood: The Dorsey Press, 1962. pp. 557.
- Hansen, Alvin; **Fiscal Policy and Business Cycle.** New York: W.W. Norton & Co., 1941.
- Higgins, Benjamin; **Economic Development.** New York: W.W. Norton & Co., Inc., 1959. pp. 803.
- Hirschman, Albert O; **The Strategy of Economic Development.** New Haven: Yale University Press, 1958. pp. 217.

- Hoselitz, Bert F., Spengler, J.J., and others. **Theories of Economic Growth.** Illinois: The Free Press of Glencoe, 1960. pp. 344.
- Kaldor, Nicholas; **Essays on Economic Stability and Growth.** London: G. Duckworth and Co., Ltd., 1960.
- Kindleberger, Charles P; **Economic Development.** New York: McGraw-Hill Book Co., 1965. pp. 425.
- Kuznets, Simon; **Six Lectures on Economic Growth.** Illinois: The Free Press of Glencoe, 1959. pp. 122.
- Leibenstein, Harvey; **Economic Backwardness and Economic Growth.** New York: John Wiley & Sons, Inc., 1963. pp. 295.
- Lerner, Daniel; **The Passing of Traditional Society.** Glencol, Illinois: The Free Press, 1958. pp. 466.
- Lewis, W. Arthur; **The Theory of Economic Growth.** Homewood: Richard D. Irwin, Inc., 1955. pp. 453.
- Maden, B.K; **Economic Problems of Underdeveloped Countries in Asia.** Bombay: Oxford University Press, 1953. pp. 290.
- Meier, GERAL M., and Baldwin, Robert E; **Economic Development.** New York: John Wiley & Sons, Inc., 1957. pp. 588.
- Mill, J.S; **Principles of Political Economy.** London: Longmans, Green, 1842.
- Novack, David E., and Lekachman, Robert; **Development and Society.** New York: St. Martin's Press, 1964. pp. 433.
- Nurkse, Ragnar; **Problems of Capital Formation in Underdeveloped Countries.** New York: Oxford Basil Blackwell, 1955. pp. 163.
- Peterson, Wallace C; **Income, Employment, and Economic Growth.** New York: W.W. Norton & Co., Inc., 1962. pp. 550.
- Rostow, W.W; **The Economics of Take-off into Sustained Growth: Proceedings of a Conference Held by the International Economic Association.** London: Macmillan & Co., Ltd., 1964. pp. 481.
- Rac, V.K.R.V; **Essays in Economic Development.** New York: Asia Publishing House, 1964. pp. 333.
- Scitovsky, Tibor; **Papers on Welfare and Growth.** Stanford: Stanford University Press, 1964. pp. 274.
- Shannon, Lyle W; **Underdeveloped Areas: A Book of Readings and Research.** New York: Harper & Brothers, Publishers 1957. pp. 496.
- Staley, Eugene; **The Future of Underdeveloped Countries.** New York: Harper & Brothers, 1954. pp. 410.

### Articles and Periodicals

- Chenery, Hollis B; "The Application of Investment Criteria," **Quarterly Journal of Economics**, Vol. 57, Feb. 1953. pp. 76-96.
- \_\_\_\_\_. "The Role of Industrialization in Development Programs," *Papers and Proceedings of the 67th Annual Meeting of AEA.*, Vol. 45, May 1955. pp. 40-57.
- Coale, Ansley J; "Population and Economic Development," **Development and Society**, ed. Novack and Lekachman, 1964. pp. 125-148.
- Fleming, J. Marcus; "External Economies and the Doctrine of Balanced Growth," **Economic Journal**, June 1955. Compiled in Agarwala book.
- Haberler, Gottfried; "Critical Observations on Some Current Notions in the Theory of Economic Development," **Development and Society**, ed. Novack and Lekachman, 1964. pp. 70-79.
- Hagen, Everett E; "Population and Economic Growth," **American Economic Review**, Vol. 49, June 1959.
- Hall, A. Stuart; "Malthus 1766, Money 1966," **Nebraska Journal of Economics and Business**, Vol. 5, No. 2, Autumn, 1966. pp. 3-12.
- Hoselitz, Bert F; "Economic Growth and Development: Noneconomic Factors in Economic Development," *Papers and Proceedings of the 69th Annual Meeting of AEA.*, May 1957.
- Lewis, W. Arthur; "Economic Development with Unlimited Supplies of Labour," **The Economics of Underdevelopment**, ed. Agarwala and Singh, 1963. pp. 400-449
- Matnur, Ashok; "Balanced V. Unbalanced Growth—A Reconciliatory View," **Oxford Economic Papers**, Vol. 18, No. 2, July 1966. pp. 137—157.
- Chlin, Goran; "Balanced Economic Growth in History," *Papers and Proceedings of the 71st Annual Meeting of AEA.*, Vol. 49, May 1959. pp. 338-353.
- Peterson, Wallace C; "Economic Policy and the Theory of Economic Growth," **Nebraska Journal of Economics and Business**, Vol. 2, No. 1, Spring, 1963. pp. 31-42.
- \_\_\_\_\_; "Investment and the Threshold of Economic Growth," **Kyklos**, Vol. 18, Fasc. 1, 1965.
- \_\_\_\_\_; "Public Policy implications of Contemporary Growth Theory," A Paper Presented to Mid-West Economic Convention in 1966, mimeographed.
- Rosenstein-Rodan, P.N; "Problems of Industrialization of Eastern and South-Eastern Europe," **Economic Journal**, Vol. 53, June-Sept. 1943, pp. 202-211.

- \_\_\_\_\_; "Notes on the Theory of the Big Push," A Paper Submitted to the Rio Roundtable of the International Economic Association, 1957, mimeographed.
- Singer, Hans W; "Economic Progress in Underdeveloped Countries," **Social Research**, Vol. 16, 1949. pp. 1-11.
- \_\_\_\_\_; "The Mechanics of Economic Development," **The Indian Economic Review**, August 1952.
- \_\_\_\_\_; "The Concept of Balanced Growth and Economic Development: Theory and Facts," University of Texas Conference on Economic Development, April 1958. pp. 4-10.
- Scitovsky, Tibor; "Two Concepts of External Economies," **Journal of Political Economy**, Vol. 62, April 1954. pp. 143-152.
- Viner, Jacob; "Barriers to Economic Development," **Development and Society**, ed. Novacek and Lekachman, 1964. pp. 81-90.